REMARKS

The present response is intended to be a full and complete response to the Office Action mailed March 29, 2010. Claims 13 to 24 are pending in the present application. Claims 13 and 15 to 18 have been amended in this response.

Claim Rejections Under 35 U.S.C. § 112:

Claim 17 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claim 17 has been amended, thereby bringing them into accord with the written description.

Claim 16 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17 has been amended to remedy this issue.

Claim 17 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17 has been amended to remedy this issue.

Claim 18 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17 has been amended to remedy this issue.

Claim 19 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The amendments made to claim 18 remedy this issue.

Claim Rejections Under 35 U.S.C. § 103:

The Examiner rejects Claims 13 to 15 and 18 to 24 under 35 U.S.C. § 103(a) as being unpatentable over Eijkhoudt et al' 428 in view of Krueger '062 and Bancon et al., '989, optionally further in view of Engelbrecht et al. '100. This rejection is respectfully traversed.

The Examiner notes that Ejkhoudt et al. '428 fails to disclose the step of contacting the gas stream with a catalyst bed to convert at least part of the oxygen and/or at least part of the unsaturated hydrocarbons present in the gas stream to one or more catalysis products. The Examiner then suggests variously Krueger '062, Bancon et al. '989 and Engelbrecht et al. '100 as complementary references that remedy this deficiency.

Ejkhoudt et al. '428 teaches the use of a "hydrophobic porous adsorbent" that "only weakly adsorb water" to remove the metal carbonyls from the gas stream (*column 3, lines 3 – 6*). The particular adsorbent is explicitly noted to have "pore sizes between 0.55 and 4 nm" (*column 3, lines 18 – 19*). The particular absorbent is

also noted to be "a SI and/or AL containing zeolite" (*column 3, lines 23 – 24*). This last requirement is somewhat redundant since one skilled in the art would recognize that a zeolite is defined as an aluminosilicate adsorbent.

The skilled artisan would recognize that zeolite has an affinity for hydrocarbons. One example that this has been well known for some time is US Pat. No. 4,269,170 (issue date May 26, 1981), in which it is stated:

> "A bonus feature of the zeolite storage system, especially when 13X is the zeolite, is its affinity for hydrocarbons. If instead of the closed-loop forced hot air system described above an open loop system is used, i.e. the radiator is a simple blower vent, and the inlet blower/water injector takes air directly from the building's interior, then the hydrocarbon affinity of the zeolite bed would serve to purify the interior air of hydrocarbon pollutants." (*column 2, lines 43 – 52*)

The skilled artisan would also recognize that 13X zeolite has pore sizes between 0.55 and 4 nm. One example that this has been well known for some time is US Pat. No. 3,939,058 (issue date February 17, 1976), in which it is stated that a "13X material is one having an X crystalline structure and a pore size of about 10A diameter." (*column 5, lines 50 – 51*). One skilled in the art would recognize that 10 angstroms is equal to 1 nanometer, hence within the designated range.

Instant claim 13, as currently amended, requires that at least one hydrocarbon be present in the stream that is leaving the first adsorption bed. As explained above, Ejkhoudt et al. '428 discloses a system that the skilled artisan would recognize precludes there being any hydrocarbons downstream of the process.

The Examiner notes that "claim 13 requires, in step (b), the use of a first catalyst bed is to convert "at least part of the oxygen and/or at least one unsaturated hydrocarbon present in the gas stream" to one or more catalysis products, so in step (b), t he first catalyst bed can be used to remove just oxygen, not hydrocarbon." Claim 13 has been amended to remove the "and/or" and replace it with "and". Support for this may be found on page 12, lines 8 – 12 of the instant specification. Thus the rejection is improper and should be vacated.

The Examiner rejects Claims 16 - 17 under 35 U.S.C. § 103(a) as being unpatentable over Eijkhoudt et al' 428 in view of Krueger '062 and Bancon et al., '989, optionally further in view of Engelbrecht et al. '100, and further in view of Koveal et al' 378 and Britton et al. '928. This rejection is respectfully traversed.

As discussed above, Eijkhoudt et al' 428 fails to disclose a system in which hydrocarbon could possibly be downstream. Hence the rejection is improper and should be vacated.

CONCLUSION

In view of the above, Applicants maintain that Claims 13 to 24 are now in condition for allowance. Early notice to this effect is earnestly solicited. Should the Examiner believe a telephone call would expedite the prosecution of the present application, the Examiner is invited to call the undersigned attorney at the number listed below.

Applicants do not believe that any fee is due at this time. However, in the event that any additional fees are due, the Commissioner is authorized to debit deposit account number 01-1375 for the amount due. Also, the Commissioner is authorized to credit any overpayment with regard to the present response to deposit account number 01-1375.

Respectfully submitted,

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